

MATERIAL SAFETY DATA SHEET - TRICLEANIUM

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: TRISODIUM PHOSPHATE
OTHER NAMES: TRISODIUM PHOSPHATE DODECAHYDRATE; SODIUM PHOSPHATE TRIBASIC
RECOMMENDED USE: DETERGENTS, STAIN REMOVER, CLEANING
SUPPLIER NAME: GEORGE LEECH NOMINEES PTY LTD
ADDRESS: 50 OSWALD STREET, MALDON, VIC 3463
TELEPHONE: GENERAL ENQUIRIES: + 61 3 5475 1443

EMERGENCY TELEPHONE NUMBER: AUSTRALIA: 1800 628 724 (ALL HOURS)
INTERNATIONAL: + 61 7 3710 3184 (ALL HOURS)

2. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: Classified as **hazardous** according to the criteria of NOHSC.
Not classified as a dangerous good according to the criteria of ADG Code (see section 14).
Classified as **schedule 5** according to the criteria of SUSDP (see section 15).

HAZARD CATEGORY: Xi - Irritant

RISK PHRASES: R36 – Irritating to eyes.
R37 – Irritating to respiratory system.
R38 – Irritating to skin.

SAFETY PHRASES: S2 – Keep out of the reach of children.
S22 – Do not breathe dust.
S24/25 – Avoid contact with skin and eyes.
S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
S46 – If swallowed, seek medical advice immediately and show this container or label.

The information contained in this MSDS is specific to the product when handled and used neat. This product when diluted may not require the same control measures as the neat product. Check with your technical representative if in doubt.

3. COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS No.	PROPORTION (% w/w)
<i>The ingredients below are considered either hazardous, dangerous goods or poison scheduled according to the criteria of NOHSC, ADG Code and SUSDP (respectively) at the levels used in the product.</i>		
trisodium phosphate dodecahydrate	10101-89-0	>99%

*The ingredients below are **not** considered either **hazardous, dangerous goods or poison scheduled** according to the criteria of NOHSC, ADG Code and SUSDP (respectively) at the levels used in the product.*

NONE

4. FIRST AID MEASURES

INGESTION: For advice, contact a Poisons Information Centre (Phone Australia 131126, New Zealand 0800 764 766) or a doctor. If swallowed, do NOT induce vomiting.

EYE CONTACT: If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

SKIN CONTACT: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor.

INHALATION: Remove from source of exposure to fresh air. Seek medical assistance if the effects persist.
**** SHOW THIS SAFETY DATA SHEET TO A DOCTOR ****

FIRST AID FACILITIES: Potable water should be available to rinse eyes or skin. Provide eye baths and safety showers.

NOTES TO PHYSICIAN: Treat symptomatically.

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5. FIRE FIGHTING METHODS

SUITABLE EXTINGUISHING MEDIA:	Water spray, foam, carbon dioxide or dry chemical powder.
HAZARDS FROM COMBUSTION:	The product is non-combustible; however, the packaging material may burn to emit noxious fumes. The product in sufficient quantity and reduced particle size is capable of creating a dust explosion. Decomposition may produce toxic fumes of phosphorus oxides.
PRECAUTIONS FOR FIRE FIGHTERS AND SPECIAL PROTECTIVE EQUIPMENT:	Fire fighters should wear self-contained breathing apparatus to minimise risk of exposure to vapour or products of combustion.
HAZCHEM CODE:	NONE

6. ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES:	Ensure adequate ventilation, work up wind or increase ventilation. Keep spectators away – rope off the area. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP:	Contain the spill and prevent contamination into confined areas, drains and waterways. Avoid generating dust. Carefully scoop up, or shovel up uncontaminated product for re-use. Sweep up contaminated material and seal in properly labelled drums for disposal in an area approved by local authority by-laws. Wash area down with plenty of water. Incineration of the product is not recommended, as it is unlikely to adequately burn.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:	Keep containers closed at all times - check regularly for leaks or spills. Transport and store upright. Avoid eye contact and repeated or prolonged skin contact. Do not eat, drink or smoke in contaminated areas. Always remove contaminated clothing and wash hands before eating, drinking, smoking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.
CONDITIONS FOR SAFE STORAGE:	Store in the original container, in a cool dry well-ventilated area out of sunlight and away from moisture, incompatible materials and foodstuffs. Keep containers closed when not in use to ensure contamination does not occur. Check regularly for leaks. Do not combine part drums of the same product, as this may be a source of contamination. Do not mix with other chemicals. Do not use aluminium, galvanised or tin-plated containers. Suitable packaging materials are polyethylene, polypropylene or 316L stainless steel. This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS:	No value assigned for this specific material by NOHSC, however as published by NOHSC The recommended exposure standard for dust in general should be 10 mg/m ³ measured as inspirable dust and 3 mg/m ³ measured as respirable particles.
BIOLOGICAL LIMIT VALUES:	No biological limit allocated.
ENGINEERING CONTROLS:	Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. Use with local exhaust ventilation or while wearing a respirator. Keep containers closed when not in use.
PERSONAL PROTECTIVE EQUIPMENT:	Protective equipment must be worn at all times. Risk assessments should always be conducted to identify the hazards and in turn determine the appropriate personal protective equipment for the hazard. Protective gloves: elbow-length natural rubber, nitrile or PVC impervious gloves. Always check with the glove manufacturer or your personal protective equipment supplier regarding the correct type of glove to use. Consult AS/NZS 2161 for further information. Eye protection: safety glasses/goggles with side shield protection. Consult AS/NZS 1336 and AS/NZS 1337 for further information. Clothing and footwear: waterproof apron, coveralls, trousers, long sleeved shirt, closed in shoes and/or safety footwear. Consult AS/NZS 2210 and AS/NZS 2919 for further information. Respiratory Protection: Avoid breathing dust. Where ventilation is not adequate, respiratory protection may be required. Any P1 or P2 particulate filter respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

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9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	White crystalline powder
ODOUR:	Odourless.
PH (1% SOLUTION):	12.1
SPECIFIC GRAVITY OR DENSITY:	B.D. 1.6g/cm ³
VAPOUR PRESSURE:	Practically none.
PERCENT VOLATILES:	No information available.
BOILING POINT / RANGE:	No information available.
FREEZING / MELTING POINT:	M.P. Loses water above 100°C to give residue, which melts above 1000°C.
SOLUBILITY:	Soluble in water - 120 g/L @ 20° C
FLASH POINT:	No known fire hazard.
FLAMMABILITY LIMITS:	No information available.
IGNITION TEMPERATURE:	No information available.
SHELF LIFE:	2 years from manufacturing date (when stored as directed).
OTHER – MOLECULAR FORMULA:	Na ₃ PO ₄ .12H ₂ O
MOLECULAR WEIGHT:	380.12

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under normal conditions of use. The shelf life is 2 years.
CONDITIONS TO AVOID:	Do not combine part drums of the same product, as this may be a source of contamination. Avoid high temperatures and dust generation.
INCOMPATIBLE MATERIALS:	Acids, oxidisers, aluminium, galvanised and tin-plated metals.
HAZARDOUS DECOMPOSITION PRODUCTS:	Decomposition may produce toxic fumes of phosphorus oxides. The packaging material may burn to emit noxious fumes.
HAZARDOUS REACTIONS:	May react exothermically with acids.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

ACUTE EFFECTS

INGESTION:	Can be severely irritating if swallowed, may result in cramps, vomiting and diarrhoea.
EYE CONTACT:	Can severely irritate the eyes. May cause severe damage.
SKIN CONTACT:	Mild to moderate skin irritation and may defat the skin with continual use.
INHALATION:	Capable of causing irritation to the nose, throat and lungs if dusty. Symptoms may include coughing, sneezing and difficulty breathing.
LONG TERM EFFECTS:	No information available.
ACUTE TOXICITY /	TOXICITY DATA FOR TRISODIUM PHOSPHATE:
CHRONIC TOXICITY:	Oral LD ₅₀ (rat) 7400 mg/kg Dermal LD ₅₀ (rabbit) 7940 mg/kg

12. ECOLOGICAL INFORMATION

ECOTOXICITY:	Avoid contaminating waterways. The product is alkaline. If large spills occurred a water pH rise could be responsible for an environmental effect on aquatic organisms. If not neutralised this product could potentially be toxic for aquatic organisms because of its alkalinity (pH > 9 can have an effect on fish, with possible fish death). pH > 8.5 could be destroying for algae. ECOTOXICITY DATA FOR TRISODIUM PHOSPHATE: LC50 Western mosquitofish (<i>Gambusia affinis</i>) 150 mg/l/96h High concentrations in receiving waters will harm aquatic life by raising pH. Orthophosphate can act as a plant nutrient and precipitate heavy metals.
PERSISTENCE AND DEGRADABILITY:	No organic components: AS4351 does not apply.
MOBILITY:	No information available.
OTHER:	None.

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13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS:	Empty containers should be forwarded to an approved agent for recycling. Avoid unauthorised discharge to sewer.
SPECIAL PRECAUTIONS FOR LANDFILL OR INCINERATION:	The product is suitable for disposal by landfill through an approved agent. Incineration of the product is not recommended, as it is unlikely to adequately burn.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT:	Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail.
UN NUMBER:	NONE
UN PROPER SHIPPING NAME:	NONE
CLASS AND SUBSIDIARY RISK(S):	NONE
PACKAGING GROUP:	NONE
HAZCHEM CODE:	NONE
INITIAL EMERGENCY RESPONSE GUIDE:	NONE
SEGREGATION DANGEROUS GOODS:	NONE
MARINE TRANSPORT:	Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
UN NUMBER:	NONE
UN PROPER SHIPPING NAME:	NONE
CLASS AND SUBSIDIARY RISK(S):	NONE
PACKAGING GROUP:	NONE
STOWAGE AND SEGREGATION:	NONE
AIR TRANSPORT:	Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) for transport by air.
UN NUMBER:	NONE
UN PROPER SHIPPING NAME:	NONE
CLASS AND SUBSIDIARY RISK(S):	NONE
PACKAGING GROUP:	NONE
ERG CODE:	NONE

15. REGULATORY INFORMATION

POISONS SCHEDULE (AUST.):	5
APVMA STATUS:	Not relevant.
TGA STATUS:	Not relevant.
AICS STATUS:	All the constituents of this product are listed.
AQIS STATUS:	Not relevant.
OTHER:	Not relevant.

16. OTHER INFORMATION

GENERAL INFORMATION:	None.
MSDS ISSUE NUMBER:	002
MSDS ISSUE DATE:	19 APRIL 2010

In any event, the review and, if necessary, the re-issue of a MSDS shall be no longer than 5 years after the last date of issue.

An electronic version of this MSDS (in pdf format) is available for download from www.tricleanium.com.au

REASON(S) FOR ISSUE: Update to conform to requirements of NOHSC:2011(2003); 16-header format.

THIS ISSUE NUMBER REPLACES ALL PREVIOUS ISSUES.

LITERARY REFERENCE:

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SOURCES FOR DATA:

LEGEND:	
AICS	Australian Inventory of Chemical Substances
APVMA	Australian Pesticides and Veterinary Medicines Authority
AQIS	Australian Quarantine and Inspection Service
AS	Australian Standard (as issued by Standards Australia)
ERP Code	Emergency Response Drill Code as found in the ICAO (International Civil Aviation Organisation) Doc 9481
MSDS	Material Safety Data Sheet
NOHSC	National Occupational Health and Safety Commission
STEL	Short Term Exposure Limit - A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TGA	Therapeutic Goods Administration
TLV	Threshold Limit Value - TLV is a proprietary name registered by the American Conference of Governmental Industrial Hygienists (ACGIH) and refers to airborne concentrations of substances or levels of physical agents to which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect.
TWA	Time Weighted Average - The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

This MSDS has been prepared from current technical data and summarises at the date of issue our best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

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End of MSDS